



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Cantor *et al.*
Serial No. : 09/030,571
Filed : February 24, 1998

Art Unit : 1634
Examiner : Betty J. Forman
Confirmation No.: 7542
Notice of Allowance Date: February 7, 2007

Title : **ARRAYS OF PROBES FOR POSITIONAL SEQUENCING BY
HYBRIDIZATION**

MAIL STOP ISSUE FEE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

COMMENTS ON EXAMINER'S REASONS FOR ALLOWANCE

Dear Sir:

Responsive to the Notice of Allowability, mailed February 7, 2007, which includes the Examiner's Statement of Reasons for Allowance, entry of the following comments into the file history of the above-captioned application is respectfully requested.

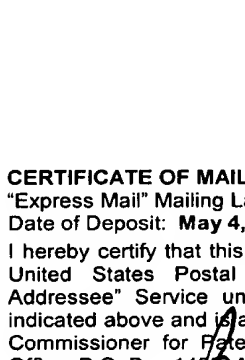
The Examiner's Statement of Reasons for Allowance states

"The claims are drawn to arrays of probes having a first and second strands wherein the second strand is longer than the first strand and the second strand has a random sequence of 3 to 10 bases as the terminal end. The second, longer strand also has an oligonucleotide of 2-20 random nucleotides ligated to the terminal end. The prior art does not teach or suggest the double stranded probes and random sequences as claimed."

Applicant requests that the following comments be made of record in the instant application.

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"Express Mail" Mailing Label Number EV 740120544 US
Date of Deposit: **May 4, 2007**

I hereby certify that this paper is being deposited with the United States Postal "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to: Mail Stop Issue Fee, Commissioner for Patents, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA, 22313-1450.


Stephanie Seidman

Claims 74-76, 92-94, 123, 124 and 136 are allowed. Claims 75, 76, 92-94, 123, 124 and 136 ultimately depend from claim 74, which recites:

74. An array of nucleic acid probes, wherein each probe comprises:
a single-stranded first nucleic acid of about 15-25 nucleotides in length;
a longer single-stranded second nucleic acid of about 20-30 nucleotides in length, comprising a nucleotide sequence complementary to the first nucleic acid and a random terminal nucleotide sequence of between 3-10 nucleotides in length; and
an oligonucleotide of 4-20 nucleotides in length, comprising a random nucleotide sequence, wherein:
the first nucleic acid is hybridized to the second nucleic acid to form a hybrid having a double-stranded portion and a single-stranded portion comprising the random terminal nucleotide sequence of between 3-10 nucleotides in length; and
the oligonucleotide is ligated to the random nucleotide sequence of the second nucleic acid.

The Examiner states that the claims recite “an oligonucleotide of 2-20 random nucleotides” ligated to the terminal end of the longer strand of a nucleic acid molecule. Applicant respectfully submits that this is not correct. As shown above, allowed claim 74 recites “an oligonucleotide of 4-20 nucleotides in length, comprising a random nucleotide sequence.” Hence, the statement by the Examiner in the Examiner's Reasons for Allowance that the “second, longer strand” of the probes in the array “has an oligonucleotide of 2-20 random nucleotides ligated to the terminal end” is not an accurate characterization of the claimed subject matter.

Further, Applicant recognizes that in accordance with M.P.E.P. § 1302.14, the Examiner's reasons for allowance need not set forth all of the details why the claims are allowed. In the above-referenced application, Applicant does not concede that the Examiner's stated reasons for allowance are the only reasons for which the claims are allowable. For example, as explained by Applicant on the record, none of the art of record, singly or in any combination thereof discloses, teaches or suggests an array of nucleic acid probes, where each probe includes a single-stranded region and a double-stranded region, where the single-stranded region includes a random sequence of between 3-10 nucleotides in length ligated to an oligonucleotide of 4-20 nucleotides in length. The oligonucleotide includes a random nucleotide sequence of nucleotides. In addition, each of dependent claims 75, 76, 92-94, 123, 124 and 136 is allowable on its own merits.

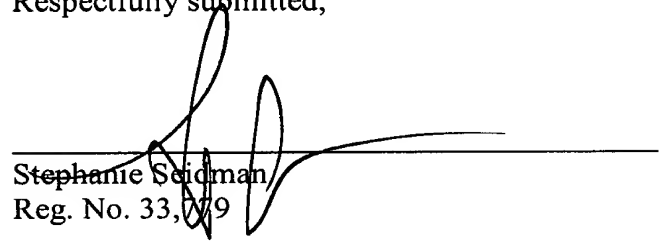
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Applicant : Cantor *et al.*
Serial No. : 09/030,571
Filed : February 24, 1998

Attorney's Docket No.: 17120-002007 / 2401G
Comments on Examiner's Reasons for Allowance

Entry of these remarks into the file history of the above-captioned application respectfully is requested.

Respectfully submitted,



Stephanie Seidman
Reg. No. 33,749

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Cantor *et al.*
Serial No. : 09/030,571
Filed : February 24, 1998
Cust. No. : 20985
Title : POSITIONAL SEQUENCING BY HYBRIDIZATION

Art Unit : 1634
Examiner : Betty J. Forman
Conf. No. : 7542

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P.O. Box 1450
Alexandria, VA 22313-1450

NOTIFICATION OF LOSS OF ENTITLEMENT TO SMALL ENTITY STATUS AND
FEE DEFICIENCY PAYMENT PURSUANT TO 37 CFR § 1.28(C)

Dear Sir:

Adjustment date: 05/07/2007 EEKUBAY1
02/28/2002 AMONDAF1 00000059 501213 09030571
04 FC:117 475.00 CR -445.00 OP

On the basis of good faith and candor, Applicant submits that there are fees that were erroneously paid as a small entity. To rectify these errors, applicant wishes to provide notification of these errors and provide payment of the **total** fee deficiencies in the form of a check in the amount of **\$4060.00**. These errors were made in good faith, without fraudulent or deceptive intent. Pursuant to the provisions of 37 CFR §1.28(c), a table is provided which includes an itemization of the deficient fees owed.

Particular Type of Fee	Current Fee Amount for a Non-Small Entity:	Small Entity Fee Paid	Date Small Entity Fee Paid	Deficiency Owed
Surcharge	\$130.00	\$65.00	July 27, 1998	\$65.00
2-month extension of time	\$450.00	\$200.00	July 27, 1998	\$250.00
3 month extension of time	\$1,020.00	\$445.00	April 4, 2001	\$575.00
Request for Continued Examination	\$790.00	\$375.00	April 25, 2003	\$415.00
1 month extension of time	\$120.00	\$55.00	April 25, 2003	\$65.00
3 month extension of time	\$1,020.00	\$475.00	November 25, 2003	\$545.00
1 month extension of time	\$120.00	\$55.00	May 27, 2004	\$65.00

Adjustment date: 05/07/2007 EEKUBAY1
08/04/1998 MPEOPLES 00000019 09030571
01 FC:205 -65.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
08/04/1998 MPEOPLES 00000019 09030571
02 FC:216 -200.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
04/30/2003 MBLANCO 00000013 09030571
01 FC:2801 -375.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
04/30/2003 MBLANCO 00000013 09030571
02 FC:2251 -55.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
06/02/2004 CCHAU1 00000062 09030571
01 FC:2251 -55.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
08/20/2004 AMONDAF1 00000075 09030571
01 FC:2801 -385.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
08/20/2004 AMONDAF1 00000075 09030571
02 FC:2251 -475.00 OP

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Date of Deposit May 4, 2007
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Phanie Seidman

Adjustment date: 05/07/2007 EEKUBAY1
12/03/2003 ZJUHR1 00000054 09030571
01 FC:2253 -475.00 OP

Adjustment date: 05/07/2007 EEKUBAY1
04/11/2005 CCHAU1 00000066 09030571
02 FC:2253 -510.00 OP

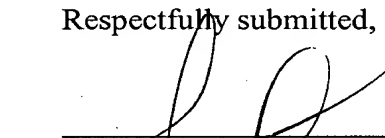
Adjustment date: 05/07/2007 EEKUBAY1
19/2005 ZJUHR1 00000005 09030571
01 FC:2801 -395.00 OP

Particular Type of Fee	Current Fee Amount for a Non-Small Entity:	Small Entity Fee Paid	Date Small Entity Fee Paid	Deficiency Owed
Request for Continued Examination	\$790.00	\$385.00	August 17, 2004	\$405.00
3 month extension of time	\$1,020.00	\$475.00	August 17, 2004	\$545.00
3 month extension of time	\$1,020.00	\$510.00	May 3, 2005	\$510.00
2 month extension of time	\$450.00	\$225.00	November 16, 2005	\$225.00
Request for Continued Examination	\$790.00	\$395.00	December 6, 2005	\$395.00

Total Fees Due: \$4060.00

☒ The Commissioner is hereby authorized to charge any fees that may be due in connection with this paper or with this application during its entire pendency to Deposit Account No. 06-1050. A duplicate of this sheet is enclosed.

Respectfully submitted,


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 Reg. No. 33,779

Attorney Docket No. 17120-002007/2401G

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05/07/2007 EEKUBAY1 00000003 09030571
 01 FC:1051 130.00 OP
 02 FC:1252 450.00 OP
 03 FC:1253 1020.00 OP
 04 FC:1801 790.00 OP
 05 FC:1251 120.00 OP

05/07/2007 EEKUBAY1 00000004 09030571
 01 FC:1253 1020.00 OP
 02 FC:1251 120.00 OP
 03 FC:1801 790.00 OP

05/07/2007 EEKUBAY1 00000005 09030571
 01 FC:1253 1020.00 OP
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05/07/2007 EEKUBAY1 00000006 09030571
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